

## Recovery Plan Action Status

**Plan Name: Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan**

**Plan Status: Final**

**Plan Date: 29-Sep-98**

**Lead Agency: USFWS**

**Lead Office: Ventura Fish And Wildlife Office**

**(805)  
644-1766 )**

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Clover lupine (Lupinus tidestromii)	1	1.31	Inform land owners - Lupinus tidestromii	Not Started			Sacramento Fish and Wildlife Office	Acquisition: General	Internal Field Assistance	Protect habitat: Monterey County
Clover lupine (Lupinus tidestromii)	1	1.32	Consult agencies - Lupinus tidestromii	Not Started			Sacramento Fish and Wildlife Office	Acquisition: General	Internal Field Assistance	Protect habitat: Monterey County
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtilae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Beach layia (Layia carnosa)	1	2.11	Minimize invasive plant threats on private land	Partially Complete			U.S. Bureau of Land Management	Work type not yet selected	Labor type not yet selected	Habitat restoration (exotics removal) has been ongoing by NGO's for many years at Humboldt Bay and Monterey Bay for Erysimum menziesii and/or Layia carnosa.

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										lupine was removed (which is known to facilitate invasion by non-native species by increasing nitrogen and organic content).
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	1	3.1	Examine the interactions of cattle grazing on listed plant habitat	Not Started			To be determined	Work type not yet selected	Labor type not yet selected	

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										Genetic study by Brinegar and Baron (2009) indicates that <i>C. pungens</i> / <i>C. robusta</i> complex is genetically very similar, and that taxonomic revision to include all varieties of this complex as two varieties of <i>C. pungens</i> may be warranted in the future (Lena Chang 7/29/2010). Extensive research conducted on life history of <i>Erysimum menziesii</i> , <i>Layia carnosa</i> and <i>Chorizanthe howellii</i> over the past decade.
Menzies' wallflower ( <i>Erysimum menziesii</i> ), Howell's spineflower ( <i>Chorizanthe howellii</i> ), Monterey spineflower ( <i>Chorizanthe pungens</i> var. <i>pungens</i> ), Monterey gilia ( <i>Gilia tenuiflora</i> ssp. <i>arenaria</i> ), Clover lupine ( <i>Lupinus tidestromii</i> ), Sonoma spineflower ( <i>Chorizanthe valida</i> ), Beach layia ( <i>Layia carnosa</i> )	2	3.4	Determine habitat requirements for plants	Ongoing Current	FY 1995 - FY 1999			Research: Habitat Requirements	Internal Field Assistance	
Clover lupine ( <i>Lupinus tidestromii</i> )	2	4.41	Establish working group - <i>Lupinus tidestromii</i>	Not Started			U.S. Fish and Wildlife Service	Management	Internal Field Assistance	No working group has been formerly convened. VFWO continues to work with State Parks and other local entities to conduct restoration, protection, and management activities as opportunities arise.

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Clover lupine (Lupinus tidestromii)	2	4.42	Implement guidelines -Lupinus tidestromii	Ongoing Current	FY 2006		To be determined	Management	Internal Field Assistance	Point Pinos restoration activities approved through consultation; not yet implemented.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.1	Monitor populations - trends	Ongoing Current	FY 2006		U.S. Fish and Wildlife Service, To be determined	Research: Population Surveys	Contract, Internal Field Assistance	Erysimum menziesii monitored generally on routine basis at many sites across the range by BLM, USFWS, and California State Parks. Layia carnosa is monitored by National Parks, Pt Reyes NS, BLM, USFWS, California State Parks, Vandenberg AFB and several NGO's across the range. Research including a comparison of critical life history functions across the range will be implemented winter 2011 to determine if recovery goals for populations at the limits of its range are feasible to achieve. A population estimate was made for the first time in 2011 of Chorizanthe howellii at McKerricher State Park, Mendocino County. Monitoring of C. valida and Lupinus is ongoing at Point Reyes National Park.

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Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.3	Survey likely habitat	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, To be determined	Work type not yet selected	Labor type not yet selected	Routine surveys conducted as required as part of project planning efforts at state and federal levels across the ranges of the species.

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